

**METHODS OF USING FET LABELED OLIGONUCLEOTIDES THAT INCLUDE A 3'→5'
EXONUCLEASE RESISTANT QUENCHER DOMAIN AND COMPOSITIONS FOR PRACTICING THE
SAME**

ABSTRACT OF THE DISCLOSURE

Methods and compositions are provided for detecting a primer extension product in a reaction mixture. In the subject methods, a primer extension reaction is conducted in the presence of a polymerase having 3'→5' exonuclease activity and at least one FET labeled oligonucleotide probe that includes a 3'→5' exonuclease resistant quencher domain. Also provided are systems and kits for practicing the subject methods. The subject invention finds use in a variety of different applications, and are particularly suited for use in high fidelity PCR based reactions, including SNP detection applications, allelic variation detection applications, and the like.